

REMARKS:

Claims 8, 11, 12 and 14-17 are pending in this application. Applicants wish to thank the Examiner for the thorough search and analysis of the prior art. Reconsideration and allowance are requested based on the following comments.

Rejection of Claims 8 , 11-14 and 16 under 35 U.S.C. §102(b). [Claim 13 has been cancelled.] This rejection, based upon DE 3708577 is respectfully traversed. An English language abstract of this reference (hereafter DE 577) from the publicly available ESPACENET database is attached. Based upon this Abstract, DE 577 relates to a rear glazing panel, or backlite rather than a windscreen or front glazing panel. That distinction alone avoids a rejection under 35 U.S.C. §102(b). The conclusion that DE 577 relates to a rear glazing panel is based on the following analysis.

DE3708577 discloses a coated automotive glazing panel having an electrical resistance of less than 2 ohms per square and a TL (luminous transmittance) of less than 20%. In the central portion of this glazing panel, a grid structure is made in the coating layer for increasing the TL to more than around 40%. This document concerns the problem of increasing the light transmission through part of the glazing panel when using a coating layer which inherently has a low light transmission. In order to conform to U.S. standards and to be sold on the U.S. market a windscreen (windshield) must have a luminous transmission of at least 70% (European standards require a luminous transmission of 75%). It is clear that the glazing of DE3708577 is not a windscreen as, firstly, the central grid structure that it uses is unimaginable as a windscreen and secondly, it has a light transmission on some portions of less than 20% and the use of the grid structure in the central portion provides the central portion with a light transmission of “at least about 40%”. The only appropriate conclusion is that this glazing panel is for a “rear window” or backlite, and not a “front window” or front windshield or “windscreen”.

A second reason that the rejection under 35 U.S.C. § 102(b) is traversed is that the Official Action takes the position that the uncoated regions would inherently permits the passage of electromagnetic signals (i.e., data) therethrough. For inherency to be appropriate, the result must always, necessarily occur. However, various factors may influence the transmission of electromagnetic data. For example, would the mesh size of the grid portion allow electromagnetic data to pass through? Inherency requires more than possibility. There is no teaching that this feature is inherent. DE 577 is silent as to the electromagnetic data transmission properties of the glazing panel.

Next, claim 8 and claim 11 each have language referring to the position of the data transmission window. The grid described in DE 577 is in the central region of the glazing panel. The central region, by definition, would not be adjacent the top edge or bottom edge. Rather, a “top region” or “bottom region” would be adjacent the top edge or bottom edge, respectively.

Finally, DE 577 provides no information vis-à-vis positioning of bus bars, nor even suggest the presence of bus bars.

For each of the foregoing reasons, the rejection based upon 35 U.S.C. §102(b) should be withdrawn.

Rejection of Claims 8, 11-14 and 16 under 35 USC 103(a) as being unpatentable over FR2737075 in view of EP378917. This rejection is respectfully traversed. [Claim 13 has been cancelled as previously noted.]

FR2737075 does not disclose an automotive windscreen glazing panel provided with a heatable solar control coating layer, but backlite glazing panels carrying an opaque grid electro-conducting bands. FR2737075 relates to automotive backlites carrying electro-conducting bands which are made by silk screen printing by depositing a conducting paste on a non-conductive enamel. FR2737075 discloses a variation of the commonly used opaque

“silver paste” heating networks used on backlites in which the width of the opaque silver paste lines is reduced to create a preferential heating zone at the centre of the glazing (see figure 1) but in which the opaque silver paste lines are sandwiched between opaque enamel bands to provide the visual effect shown in figure 3. Such heating networks are not used on windscreens (windshields) primarily because the opaque nature of the heating network is incompatible with the vision required through windshields. Such opaque heating networks are clearly not solar control layers and FR2737075 teaches nothing in relation to the combination of an electrically heatable solar control layer and a data transmission window.

There is no motivation for the person of ordinary skill in the relevant art to try or attempt to use a heatable solar control coating layer of EP378917 in the configuration proposed by FR2737075. The absence of such motivation is not surprising since such a combination would have no technical sense for at least the following four reasons:

(1) A primary reason for arranging the opaque silver paste of FR2737075 in the form of a grid with spaces in between the lines of silver paste is to allow vision through the backlite, for example when looking through a rear view mirror; the solar control coating of EP378917 allows vision therethrough and there is thus no need or motivation to configure this as a grid structure to allow any vision therethrough.

(2) The solar control coating of EP378917 has a far greater resistance than the silver paste used in FR2737075; consequently, using only thin lines of the coating of EP378917 in the configuration of FR2737075 would not permit the desired heating characteristics for the backlite.

(3) It is generally disadvantageous to apply a coating of the type of EP378917 in anything other than a continuous layer as, inter alia, this will create an undesirable visual difference between the coated and uncoated portions.

(4) The object or purpose of applying a solar control layer is to reduce overheating by solar energy through the glazing which would be generally contradictory with only providing the solar control layer as thin lines according to the configuration of FR2737075.

As nothing in these documents discloses or suggests a glazing panel provided with a solar control layer and a data transmission window, present claims 8, 11-14 and 16 are non-obvious over FR2737075 in view of EP378917. Accordingly, reconsideration and withdrawal of this rejection is requested.

Rejection of Claims 15 and 17 under 35 USC 103(a) as being unpatentable over FR2737075 in view of EP378917 and further view of Sperbeck (US 5,354,966), or alternatively, DE3708577 in view of Sperbeck (US 5,354,966) is respectfully traversed.

Claims 15 and 17 depend either directly or indirectly from claim 8 which by itself defines a glazing panels which is new and inventive over these cited combinations. None of the glazings disclosed in FR2737075, EP378917, DE3708577 or in Sperbeck have a data transmission window and a heatable solar control coating.

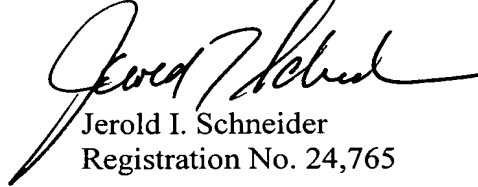
Sperbeck discloses a window defogging system wherein an ITO coating on the glass is electrically heated. Sperbeck neither mentions nor suggests the problem of electromagnetic data transmission through an ITO layer and is entirely silent on combining a heatable solar control coating with a data transmission window.

The disclosure or suggestions of Sperbeck in combination with FR2737075 in view of EP378917 or with DE3708577 could not have led the person of ordinary skill in the art to the invention defined by claims 15 and 17. It appears that the Official Action is merely "picking and choosing" statements from prior art documents to create a mosaic, after the fact, to match and thus reject the claims. It is submitted that this type of rejection is improper. No bases or motivations for the various combinations in the rejections have been described.

For the above reasons, reconsideration, withdrawal of all rejections and allowance of all claims is respectfully solicited. Should the Examiner be of the opinion that a telephone or personal conference would expedite the prosecution of this application, the Examiner is requested and encouraged to call Applicants' attorney at the telephone number given below.

Respectfully submitted,

PIPER RUDNICK LLP



Jerold I. Schneider
Registration No. 24,765

1200 Nineteenth Street, N.W.
Washington, D.C. 20036-2412
Telephone No. (202) 861-3900
Facsimile No. (202) 223-2085



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MARKED-UP COPY OF AMENDED CLAIMS

8. (Amended) [A] An automotive windscreen glazing panel in which the glazing panel perimeter comprises at least a top edge, a bottom edge and first and second side edges, the bottom edge being longer than the top edge and substantially parallel thereto and each of the side edges being substantially the same length as each other and shorter than the top edge,

in which the glazing panel is provided with an electrically heatable solar control coating layer over at least part of its surface area,

in which the glazing panel is provided with a data transmission window adapted to permit electromagnetic data transmission therethrough,

in which the data transmission window permits transmission of a greater proportion of incident electromagnetic data than the proportion of incident electromagnetic data transmitted by an equivalently sized portion of the glazing panel provided with the solar control coating,

in which the data transmission window is at least in part surrounded by the coating layer and is positioned adjacent to either the top edge or the bottom edge of the glazing panel,

in which the first bus bar is arranged substantially adjacent to and extends substantially along the first edge of the glazing panel, and

in which the second bus bar is arranged substantially adjacent to and extends substantially along the second side edge of the glazing panel.

11. (Amended) An automotive windscreen glazing panel having

an electrically heatable solar control coating layer;

spaced first and second bus bars adapted to relay electrical power to the coating layer;

a data transmission window;

the first bus bar positioned adjacent a first side edge of the glazing panel;

the second bus bar positioned adjacent a second side edge of the glazing panel; and

one of the following:

- (a) the data transmission window is positioned adjacent the top edge of the glazing panel;
- (b) the data transmission window is positioned adjacent the bottom edge of the glazing panel.